

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 10/620,654 Confirmation No.: 1421

Applicant : Rabasco, John J.

Filed : July 16, 2003

For : POLYMER EMULSION COATINGS FOR CELLULOSIC
SUBSTRATES WITH IMPROVED BARRIER PROPERTIES

Art Unit : 1773

Examiner : Tarazano, Donald L.

Docket No. : 06326 USA

Customer No. : 23543

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<div style="text-align: center;"> MARY E. BONGIORNO Type or print name of person submitting paper _____ /Mary E. Bongiorno/ Signature of person submitting paper </div> <div style="text-align: right; margin-top: 20px;"> _____ 19 September 2007 Date </div>		

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

REMARKS ACCOMPANYING RCE

Sir:

- ☐ A *insert length of time* extension of time is requested and authorization to charge the Account of assignee is provided in an enclosed form.
- ☐ **Amendments to the Specification** begin on page _____ of this paper.
- ☐ **Amendments to the Claims** are reflected in the listing of claims which begins on page _____ of this paper.
- ☐ **Amendments to the Drawings** begin on page _____ of this paper and include an attached replacement sheet(s).
- ☐ **Amendments to the Abstract** are on page _____ of this paper. A clean version of the Abstract is enclosed.
- ☒ **Remarks/Arguments** begin on page 2 of this paper.

Remarks/Arguments

This Request for Continued Examination (RCE) is being made after a Notice of Allowance and before the Issue Fee has been paid. The RCE is filed in order to enable the Examiner to consider references that were submitted in office actions from foreign patent offices. Applicants believe that none of the references are relevant to the patentability of the allowed patent application. The reasons are given below.

US 6,548,120 (US '120) discloses a recyclable and repulpable coated paper stocks where one type of coating is based upon ethylene-vinyl acetate adhesives. The coatings are used as barrier coats. Airflex® 100 HS VAE (vinyl acetate-ethylene) polymer is listed as a representative polymer in Example 3, col. 8, line 45 to col. 9, line 20, and acknowledged as an Air Products' commercial polymer. Airflex 100 HS VAE is a different polymer and does not have ethylene crystallinity. We were aware of this reference and tests were run on this polymer and compared to the polymers having ethylene crystallinity and claimed here. Please refer to the table, page 22, and paragraphs [0062], [0063] and [0064], page 23, of the specification, for a review of the data and comments on the results. It is shown in the table that Airflex 100 HS VAE did not meet the tests required, particularly the thermal requirements for packaging microwavable food products.

CN 1205341 (CN '341) pertains to an AB type block copolymer of polyvinyl acetate and polystyrene or polymethylacrylate which is prepared by first polymerizing vinyl acetate in carbon tetrachloride forming a linear polyvinyl acetate polymer followed by polymerization of the linear polyvinyl acetate polymer with styrene or acrylate type monomers. There are several technical differences between our Claim 1 vinyl acetate-ethylene polymer and the AB type block copolymer for use in preparing coated cellulosic product which are rather apparent and these include: (a) the polymers claimed for application to the cellulosic substrate in our case are formed by emulsion polymerization not solvent polymerization; (b) the presently claimed polymers which are formed by emulsion polymerization are copolymerized, i.e., the vinyl acetate and ethylene monomers are copolymerized. They are not AB type block copolymers as are those in CN '341; and (c) CN '341 does not disclose ethylene as a comonomer. Summarizing, it is our view the polymers described in CN '341 are entirely different from those

employed and claimed in the present case and thus they are non obvious for use in preparing grease and water resistance cellulosic products.

JP49-33353-B discloses preparation of a copolymer emulsion in which an increase in viscosity of the polymerization system is prevented (page 2, second paragraph, of the English translation). At paragraph [0020] of the present patent application, it states that the polymers of this invention are highly viscous with minimal melt flow characteristics and they maintain a high viscosity and resistance to flow at temperatures above their melt temperatures. The polymers of this invention are therefore entirely different in structure and properties compared to the polymers disclosed in JP49-33353-B.

IDS submitted on February 17, 2005

The Examiner is also asked to acknowledge receipt of the IDS submitted on February 17, 2005 and received in the USPTO on February 22, 2005. We have not received the acknowledgment copy of the IDS.

Thank you for your consideration of this matter.

Respectfully submitted,

/Mary E. Bongiorno/

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